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BIBLIOGRAPHY *of*
SOIL SCIENCE, FERTILIZERS
and GENERAL AGRONOMY
1934 - 1937



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PREFACE

The arrangement of the Bibliography follows the same general lines as its predecessor, and a detailed explanation of the classification and mode of use will therefore not be given here.* The Bibliography is compiled from the references included in the monthly lists Nos. 42-77 of "Publications relating to Soils and Fertilizers", and covers the period 1934-1937. A few references dated between 1931 and 1933, which were omitted from the first volume, are also included.

Several alterations have been made in the classification numbers assigned to certain subjects, in order to conform to recent changes and extensions in the International Decimal Classification. Such changes are inevitable in a still evolving universal classification. The index in this Bibliography is, moreover, arranged by "specific entry", e.g. "Quantitative analysis" instead of "Analysis, quantitative". The main result of these changes is that the subject indexes of the two Bibliographies are not completely interchangeable. A list of changed numbers, and numbers that were not used at all in the 1931-1934 Bibliography, follows.

Numerous entries in this Bibliography have a "language indication" appended. A capital letter in square brackets following the reference denotes the language in which the paper is written; a small letter denotes that there is a summary in another language—e.g. [G.e.] = German with English summary. English E is only indicated for papers published in journals usually written in other languages. This method of indicating language has only been introduced at the Bureau since 1936 and the indication is consequently missing from earlier references. Where the Bureau staff has seen only an abstract reference and not the original paper, no language indication is given. It

* "Bibliography of Soil Science, etc. 1931-1934." Price 25 -. A reprint of the "Explanatory Preface", including a full index to the classification numbers employed, is obtainable from the Bureau on request.

PREFACE

has not been considered necessary to give a list of the letters (which are mainly self-explanatory) used to indicate language.

In order to save space in the main Subject Index, papers dealing with plant nutrition, fertilizing, etc., with reference to specific crops have sometimes been cross-indexed under a general heading "Crops", in the same way as references in the geographical section (G), as follows :

Basic slag	631.853
.....	
<i>Crops</i> : 633.63-, 635-	
instead of separately, e.g. :	
for sugar beet	633.63-
for vegetables	635-

The list of abbreviations of journals and periodicals (p. 411) is complementary to the list given in the 1931-1934 Bibliography.

INDEX TO NEW CLASSIFICATION NUMBERS

not used in the 1931-1934 Bibliography

(Where a number has been changed, the one previously used is given in parentheses, after the subject.)

	Miscellaneous	: 631.347.2	Porous hose irrigation (626.83)
312	Population		
525.5	Seasonal variations	631.347.21	Canal irrigation
536.63	Specific heat	631.347.22	Subterranean irrigation (621.643.2)
54	Chemistry		
541.182.025	Thixotropy	631.347.24	Sprinkling irrigation (621.647.24)
546.14	Bromine		
546.212	Heavy water	631.4	Soils
546.73	Cobalt	631.416.319	Arsenic in soil
546.74	Nickel	631.416.323	Selenium in soil
547.456	Pentoses	631.416.327	Boron in soil
547.457.1	Glucose	631.416.328.4	
547.581.2	Benzoic acid		Silica in soil
547.995.1	Chitin	631.416.821.1	
55	Geology		Aluminium in soil
550.35	Earth rays	631.416.846	Magnesium in soil
551.41	Relief	631.416.847	Zinc in soil
551.58	Climate, climatol- ogy (551.562)	631.416.856	Copper in soil
551.763	Greensand	631.416.871.1	
552.323	Volcanic rocks		Manganese in soil
552.323.5	Basalt	631.416.872	Iron in soil
553.492.1	Bauxite	631.416.882.1	
553.983	Bitumen		Titanium in soil
57.8	Biology, Botany	631.416.888.1	
577.16	Vitamins (612.392.01)	631.417.4	Vanadium in soil
577.8	Sex		Carbon-nitrogen ratio (631.417.3)
581.186.3	Epinastic response	631.417.745.881	
61	Pathology		Cellulose in soil
612.753	Bone formation	631.417.749.18	
616.936	Malaria		Cyanuric acid in soil
616.999.99	Tuberculosis	631.423.6	Determination of CO ₂ in soil
62	Engineering		Nitrification (631.461.2/3)
627.51	Flood control	631.461.3	
631.3	Agricultural equipment	631.461.74	Miscellaneous bacteria
631.3 : 531.781	Dynamometer	631.467	Micro-fauna

INDEX TO NEW CLASSIFICATION NUMBERS

631.5.6	Cultivation, Re-	633.347	Kale
	clamation	633.364	Lespedeza
631.548	Hydroponics	633.372	Broom
631.613	Terracing (624.13)	633.375	Black locust
631.617	Reclamation of	633.377	Derris
	deserts	633.378	Cicer
631.62 : 631.432.3		633.393	Cactus
	Drain spacing	633.425	Kohl-rabi
	(626.862.3)	633.524.33	Urena lobata
631.8	Fertilizers	633.527.3	Cyperus malaceniis
631.811.5	Sodium in plant	633.682	Cassava
	nutrition	633.75	Poppy
631.811.93	Silica in plant nu-	633.812.426	Lemon grass
	trition	633.812.764	Thyme
631.835	Sylvinite	633.822	Peppermint
631.839	Nepheline	633.855.335	Betel nut
631.859.42	Magnesium phos-	633.881.15	Digitalis
	phate (631.859)	633.881.33	Hydrastis
631.879.2	Sewage (631.849)	633.883.252	Aloe
631.893	Compound fertili-	633.883.259.43	
	zers (631.89)		Cassia
631.893.12	"Amphophos", "Ni-	633.885.1	Cinchona
	trophos"	634	Arboriculture
631.893.123	"Nitrophoska"	634.14	Quince
631.893.13	"Potazote"	634.23	Cherry
631.893.14	Nitrochalk	634.26	Nectarine
632	Plant protection	634.371	Litchi
632.187	Fire damage	634.38	Mulberry
632.536	Bracken	634.431	Lanzon
632.556.7	Water hyacinth	634.471	Mangosteen
632.557.1	Rushes	634.48	Cucumber tree
632.575.7	Mercurialis, Spurge	634.54	Hazel
632.587.56	Dichapetalum	634.573	Cashew nut
632.588.6	Epilobium	634.63	Olive
632.591.6	Witchweed	634.662	Jujube
632.594.2	Bindweed	634.725	Gooseberry
632.597	Bramble		(634.72)
632.599.8	Compositae	634.776	Chinese gooseberry
632.651.6	Earthworms	634.953.6	Windbreaks
	(595.16)		(631.543.82)
632.732	Termites	634.956.23	Deforestation
632.765	Wireworms (632.7)	634.972.2	Maple
632.8	Virus diseases	634.972.3	Poplar
633	Cultivated crops	634.972.4	Chestnut
633.177	Kafir corn	634.972.6	Birch
633.24	Timothy	634.973.37	Leucaena glauca
633.261	Bermuda grass	634.973.931	Ash
633.266	Paspalum	635	Horticulture
633.282	Andropogon, The-	635.24	Jerusalem artichoke
	meda	635.32	Artichoke
633.287	Bouteloua	635.346	Seakale
633.289	Agropyron, Nardus,	635.61	Melon
	Berseem	635.646	Egg plant
633.33	Cowpea	635.7	Herbs

INDEX TO NEW CLASSIFICATION NUMBERS

635.935.74	Narcissus	(569)	Palestine [(569.4)]
635.935.79	Gladiolus	(593)	Siam
635.937.12	Hydrangea	(599)	Tonkin
635.939.1	Lavender	(611)	Tunis
635.939.124	Azalea	(612)	Tripoli
635.939.94	Orchid	(614)	Cyrenaica
635.939.98	Aster	(62)	Morocco
635.944	Tulip	(635)	Eritrea
	Miscellaneous	(65)	Algeria
637.127.3	Cascia	(663)	Sénegal
637.3	Cheese	(665.2)	French Guinea
637.4	Egg quality	(665.8)	Cape Verde Is-
662.74	Illuminating gas		lands
663.12	Yeast	(669.9)	Fernando Po
663.883.2	Jattopha	(676)	East Africa
664.15	Molasses	(676.1)	Uganda
778.35	Aerial photography	(676.2/9)	Kenya [(676)]
		(711)	British Columbia
	Geographical	(72)	Mexico
(410)	Great Britain	(86)	Columbia
(415)	Northern Ireland	(883)	Surinam
(439)	Hungary [(439.1)]	(911.14)	Sarawak
(469)	Portugal	(912)	Celebes
(474.2)	Esthonia	(95)	New Guinea
(519)	Chosen	(961)	Fiji

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- (946) 634.11-1.4—Stephens, C. G.; Taylor, J. K. The apple-growing soils of Tasmania. *Aust. Coun. Sci. Indust. Res. Bull.* 92, 1935, pp. 55.
- (95) 633.74-1.4—Green, E. C. D. The possibility of developing an economic cacao industry in the mandated territory of New Guinea after a study of the industry in Trinidad, and a suggested policy for that development. *N. Guinea Dept. Agric. Bull.* 2 (Leaf. 70), 1934, pp. 72.
- (961) 631.62—Clarke, H. F. Drainage methods in Fiji. *Abstr. Pap. 5th Cong. Int. Soc. Sug. Cane Tech. Agric. Sect. Australia* 1935. *Hawaii. Plant. Rec.* 39, 1935 (287).
- (969) 631.422—Conant, R. K. Soil analyses by rapid chemical methods at Oloa Sugar Company, Ltd. *Repts. Assoc. Hawaii. Sug. Tech. Fifteenth Ann. Meet.* 1936 (51-53).
- (969) 631.422—Hossack, A. T. Rapid chemical methods regarding soil fertilization—the importance of collecting representative soil samples. *Repts. Assoc. Hawaii. Sug. Tech. Fifteenth Ann. Meet.* 1936 (55-60).
- (969) 631.422—Taylor, H. W. The practical application of rapid chemical analyses at Pioneer Mill Company, Ltd. *Repts. Assoc. Hawaii. Sug. Tech. Fifteenth Ann. Meet.* 1936 (73-79).
- (969) 631.81—Moir, W. W. G. A fertilizer policy developed with the aid of experiments. *Hawaii. Plant. Rec.* 39, 1935 (109-112).
- (969) 633.73-1.5—Ripperton, J. C.; Goto, Y. B.; Pahau, R. K. Coffee cultural practices in the Kona district of Hawaii. *Hawaii. Agric. Expt. Sta. Bull.* 75, 1935, pp. 64.
- (969) 634.774-1.5—Duthie, J. Pineapple growing in Hawaiian Islands. *Queensland Agric. J.* 45, 1936 (182-186).
- (98) 631.4—Liverovsky, Yu. Soils of the extreme North and their chemism. *Khim. Sotsial. Zemled.* No. 3, 1937 (61-68). [R.]
- (98) 631.445.2—Chekalov, K. I. The agricultural chemical characterization and the physical properties of some mineral soils of the Polar regions. *Trudy L'OVII' L.I.* No. 37 (No. 1), 1935 (159-192). *Pedology* 1936 (929). [R.]
- (98) 631.461—Isachenko, B. L.; Simakova, T. L. Bacteriological investigations of arctic soils. *Trudy Arkt. Inst.* 9, 1934 (107-124). *Pedology* 1936 (164).
- (98) 631.48—Gripp, K.; Simon, W. G. The experimental preparation of "Brodeboden". *Naturwissenschaften* 22, 1934 (8). *Z.P.D.* 28 (379).

LIST OF ABBREVIATIONS OF JOURNALS AND PERIODICALS*

[The abbreviation is followed by the full title of the journal and place of publication (where known)].

- A.C.L.** See Abs. Curr. Lit. Agric. Engng.
- Abs. Curr. Lit. Agric. Engng.** Abstracts of Current Literature. Institute for Research in Agricultural Engineering. Oxford.
- Acad. Sci. U.S.S.R. SOPS.** Academy of Sciences (Sovet po Izucheniu Proizvoditel'nykh Sil) Soviet for the Study of Productive Forces. U.S.S.R.
- Acta Soc. Bot. Polon.** Acta Societatis Botanicorum Poloniae. Warsaw.
- Acta Univ. Asiae Med.** Acta Universitatis Asiae Mediae Series VII d. Pedologia (Trudy Sredne-Asiatskogo Gosudarstvennogo Universiteta Seria VII d. Pochvovedenie). Tashkent.
- Afric. Observer.** African Observer. Bulawayo, S. Rhodesia.
- Agric. Chron.** Worcestershire Agricultural Quarterly Chronicle. Worcester.
- Agric. Libica.** Agricoltura Libica. Bollettino Mensile del Ro. Ufficio Centrale per i Servizi Agrari della Libia. Tripoli.
- Agric. Sci. Kazakstan.** Agricultural Science in Kazakstan. U.S.S.R.
- Agric. Suppl. Palestine Gaz.** Agricultural Supplement to the Palestine Gazette, Department of Agriculture and Fisheries, Jerusalem.
- Agricoltura, Louvain.**
- Agricoltura, Madrid.**
- Agronomía, B. Aires.** Buenos Aires.
- Agronomía, Tartu.** Estonian Journal of Agricultural Science (Society of Estonian Agronomists and the Academic Agricultural Society). Tartu, Estonia.
- Amer. Gas. Assoc. Mo.** American Gas Association Monthly. New York.
- Amer. J. Pharm.** American Journal of Pharmacy. Philadelphia.
- Amer. J. Pub. Health.** American Journal of Public Health and the Nation's Health. New York.
- Amer. Min.** American Mineralogist. Washington, D.C.
- Amer. Rose Ann.** American Rose Annual. Harrisburg, Pa.
- Amer. Soc. Test. Mat. Bull.** American Society for Testing Materials. Bulletin. Philadelphia, Pa.
- An. Soc. Españ. Fís. Quím.** Anales de la Sociedad Española de Física y Química. Madrid.
- An. Fac. Filos. Univ. Chile.** Santiago.
- Ann. Bot. Vanamo.** Annales Botanici Societatis Zoologicae-Botanicæ Fennicae Vanamo. Helsingfors.
- Ann. Chim. Anal.** Annales de Chimie Analytique. Paris.
- Ann. Eugenics.** Annals of Eugenics. Cambridge.

* Only abbreviations not used in the earlier Bibliography (1931-1934) are included in this list.

ABBREVIATIONS OF JOURNALS AND PERIODICALS

- Ann. Hyg. Publ. Paris.** Annales d'Hygiène Publique et de Médecine Légale (Industrielle et Sociale). Paris.
- Ann. Ist. Agrar. Milano.**
- Ann. Ist. Sup. Agrar. Portici.** Annali del Istituto Superiore Agrario di Portici.
- Ann. Rev. Biochem.** Annual Review of Biochemistry. Stanford University, Palo Alto.
- Ann. Sci. Nat.** Annales des Sciences Naturelles. Paris.
- Ann. Univ. Sofia.** Annuaire de l'Université de Sofia (Godishnik na Sofiiska Universitet). Sofia, Bulgaria.
- Anzeiger Schädlingssk.** Anzeiger für Schädlingkunde. Berlin.
- Arb. Inst. Landw. Mikrobiol.** See Trudy Inst. S.-Kh. Mikrobiol.
- Arb. Landw. VersSta. Kiev.** See Trudy Kiev. Opyt. S.-Kh. Sta.
- Arch. Fitotec. Uruguay.** (Herb. Abs.).
- Arch. Hyg. Bakt.** Archiv für Hygiene (und Bakteriologie). München.
- Arch. Protistenk.** Archiv für Protistenkunde. Jena.
- Arg. Inst. Biol. Veget.** Arquivos do Instituto de Biologia Vegetal. Rio de Janeiro.
- Arxius.** (C.A.).
- Assoc. Franç. Avanç. Sci. Cong. Rabat.**
- Atti Soc. Ital. Prog. Sci.** Atti della Società Italiana per il Progresso delle Scienze. Rome.
- Aust. Forestry.** Australian Forestry. The Journal of the Institute of Foresters of Australia.
- Aust. Tobacco Investig. Bull.** Australian Tobacco Investigations. Bulletin.
- Aust. Vet. J.** Australian Veterinary Journal. Sydney.
- B.I.I.** Bulletin of the Imperial Institute. London.
- B.W.I. Cent. Sug. Cane Br. Sta. Bull.** West Indies Central Sugar Cane Breeding Station. Bulletin. Bridgetown, Barbados.
- Bad. Bauernstand.** Badischer Bauernstand.
- Bad. Geog. Abh.** Badische Geographische Abhandlungen. Freiburg im Breisgau.
- Bautech.** Bautechnik. Berlin.
- Better Crops with Plant Food.** Washington, D.C.
- Bioklim. Beibl. Met. Ztschr.** Bioklimatische Beiblätter der Meteorologischen Zeitschrift. Braunschweig.
- Biol. Reichsanst. Flugbl.** Biologische Reichsanstalt für Land und Forstwirtschaft. Flugblatt. Berlin.
- Biol. Rev.** Biological Reviews of the Cambridge Philosophical Society. Cambridge.
- Biol. Zbl.** Biologisches Zentralblatt. Leipzig.
- Bl. PflBau. PflZücht.** Blätter für Pflanzenbau und Pflanzenzüchtung (Zeitschrift des Deutschen Saatzüchtervereins für die Tschechoslowakei in Tetschen a. Elbe, Böhmen). Tetschen-Liebewerdt, Czechoslovakia.
- Black Rock Forest Bull. (or Pap.).** Black Rock Forest Bulletin (or Paper). Cornwall-on-the-Hudson, New York.
- Bodenk. Pflernähr.** Bodenkunde und Pflanzenernährung. Formerly Zeitschrift für Pflanzenernährung, Düngung und Bodenkunde. Berlin.
- Bol. Agric. Bogotá.** Boletín de Agricultura. Bogotá.
- Bol. Inst. Investig. Agron. Madrid.** Boletín del Instituto de Investigaciones Agronomicas. Madrid.

ABBREVIATIONS OF JOURNALS AND PERIODICALS

- Bol. Min. Agric. Rio de J.** Boletim do Ministério da Agricultura, Indústria e Comércio, Rio de Janeiro.
- Bol. Soc. Quím. Peru.** Boletín de la Sociedad Química del Peru, Lima.
- Boll. Tec. Ist. Sper. Tab. Scafati.** Bollettino Tecnico R. Istituto Sperimentale per le Coltivazioni dei Tabacchi "Leonardo Angeloni", Scafati (Salerno).
- Boll. Uff. Agrar. Tripolit.** Bollettino. Reale Ufficio per i Servizi Agrari della Tripolitania, Tripoli.
- Bot. Rev.** Botanical Review, New York.
- Bot. Zh.** Botanichesky Zhurnal (Botanical Journal), Leningrad.
- Brit. Sci. Guild Pub.** The British Science Guild Publication, London.
- Brit. Solomon Is. Agric. Gaz.** British Solomon Islands Protectorate, Agricultural Gazette, Tulagi.
- Bul. Sci. Fakult. Terkult. Kjusu Imp. Univ.** Bulteno Știința de la Fakultato Terkultura, Kjusu Imperio Universitato, Fukuoka, Japan.
- Bull. Acad. Méd. Paris.** Bulletin de l'Académie de Médecine, Paris.
- Bull. Acad. Roy. Belge.** Bulletin de l'Académie Royale de Belgique, Brussels.
- Bull. Acad. Sci. (U.S.S.R.) (Cl. Sci. Math.) Biol. Ser.** Bulletin de l'Académie des Sciences de l'Union des Républiques Soviétiques Socialistes, Classe des Sciences Mathématiques et Naturelles, Série Biologique (Izvestia Akademii Nauk), Moscow.
- Bull. Agric. Martinique.** Bulletin Agricole Service de l'Agriculture de la Martinique, Port-de-France.
- Bull. Agric. Tunis.** Bulletin de la Direction de l'Agriculture, du Commerce et de la Colonisation, Tunis.
- Bull. Assoc. Chim.** Formerly Bull. Assoc. Chim. Sucr.
- Bull. Coll. Agric. Forest. Univ. Nanking.** Bulletin of the College of Agriculture and Forestry University of Nanking.
- Bull. Geol. Soc. Amer.** Bulletin of the Geological Society of America, New York.
- Bull. Geol. Soc. China.** Bulletin of the Geological Society of China, Peking.
- Bull. Hydro-Electric Power Comm. Ontario.** (E.S.R.).
- Bull. Inst. Colon. Havre.** Bulletin de l'Institut Colonial du Havre, Bulletin Mensuel, Havre.
- Bull. Inst. Colon. Marseille. Mat. Grasses.** Bulletin de l'Institut Colonial de Marseille, Section des Matières Grasses, Marseille.
- Bull. Moscow Soc. Nat.** Bulletin of the Moscow Society of Naturalists (Bulletin Moskovskogo Obshchestva Ispytatelei Prirody), Leningrad.
- Bull. Soc. Bot. Bulgarie.** Bulletin de la Société Botanique de Bulgarie, Sofia.
- Bull. Soc. Geol. Fr.** Bulletin de la Société Géologique de France, Paris.
- Bull. Soc. Nat. Hort. Fr.** Bulletin de la Société Nationale d'Horticulture de France, Paris.
- Bull. Soc. Pharm. Bordeaux.** Bulletin des Travaux de la Société de Bordeaux.
- Bull. Sochi Zonal Fruit Expt. Sta. U.S.S.R.**
- Bull. SoluzNIKHI.** Bulletin of the Cotton Research Institute, Tashkent.
- Bull. Sredneaz. Univ.** Bulletin Sredne-Asiatskogo Gosudarstvenno Universiteta

ABBREVIATIONS OF JOURNALS AND PERIODICALS

- (Bulletin de l'Université de l'Asie Centrale). Tashkent.
- Bull. Syndicat Algérien Agrumes.** Bulletin Syndicat Algérien des Agrumes. Alger.
- Bur. Mines Rept. Investig.** Bureau of Mines. Reports of Investigations. Washington, D.C.
- Burma Agric. Surv.** Department of Agriculture, Burma. Agricultural Survey. Rangoon.
- C.A.C.** Colonial Advisory Council. London.
- C.A.S.B.** Central Agricultural and Scientific Bibliography. Science Library. London.
- C.M.R.** Current Monthly Record. Imperial Forestry Institute. Oxford.
- C.R. Cong. Int. Géog. Paris.** Comptes Rendus du Congrès International de Géographie Paris.
- C.R.E.A. News Letter Chicago.** (E.S.R.)
- C.R. Trav. Inst. Rech. Agron. Indochine.** Comptes Rendus des Travaux de l'Institut de Recherches Agronomiques de l'Indochine. Hanoi.
- Calif. Sug. Beet Conf. Sacramento.** California Sugar Beet Conference. Sacramento.
- Campesino.** Organo Oficial de la Sociedad Nacional de Agricultura. Santiago de Chile.
- Campo, Brazil.** O Campo, Agricultura, Industria, Comercio. Rio de Janeiro.
- Canada Dept. Agric. Pub.** Dominion of Canada. Department of Agriculture. Publication. Ottawa.
- Carnegie Instn. News Serv. Bull.** Carnegie Institution of Washington. News Service Bulletin. Washington, D.C.
- Cement. Cement and Cement Manufacture.** London.
- Cent. Landown. Assoc. J.** Central Landowners' Association. Journal. London.
- Ceylon Dept. Agric. Bull.** Ceylon Department of Agriculture. Bulletin. Colombo.
- Chem. Fabr.** Die Chemische Fabrik (Teil B. Zeitschrift des Vereins Deutscher Chemiker). Berlin.
- Chem. Indust.** Chemistry and Industry. (Formerly Journal of the Society of Chemical Industry). London.
- Chem. Obzor.** Chemický Obzor. Prague.
- Chem. Trade J.** Chemical Trade Journal and Chemical Engineer. Manchester.
- Chemistry, China.** Nanking.
- Chim. Indust. Modena.** Chimica nell'Industria, e Altre sue Applicazione (nell'Agricoltura e nella Biologia). Modena.
- China J.** The China Journal. (Formerly China Journal of Science and Arts). Shanghai.
- Citrus Grower.** Uitenhage, S. Africa.
- Citrus Leaves.** (Mutual Orange Distributors). Redlands, California.
- Commonwealth Forestry Bur. Bull.** Australian Commonwealth Forestry Bureau Bulletin. (Sydney?)
- Commun. Conseil Rech. Sci. Indochine.** Communication au Conseil de Recherches Scientifiques de l'Indochine. Hanoi.
- Commun. Int. Hort. Cong. Rome.** Communications of the International Horticultural Congress. Rome.
- Cong. Chim. Indust.** Congrès de Chimie Industrielle. Société de Chimie Industrielle. Paris.
- Cong. Int. Chim. Pure Appl.** Congrès International de Chimie Pure et Appliquée. Madrid.

ABBREVIATIONS OF JOURNALS AND PERIODICALS

- Cong. Int. Génie Rural Pub. Agric.** Congrès International de Génie Rural. Publication Agricole. Madrid.
- Cong. Int. Mines Métall. Géol. Appl. Paris. Geol. Sect.** Congrès International des Mines, de la Metallurgie et de la Géologie Appliquée. Geological Section. Paris.
- Cong. Int. Tech. Chim. Indust. Agric.** Congrès International Technique et Chimique des Industries Agricoles. Brussels.
- Čsl. Zeměd.** Československý Zemědělec. Prague.
- Dansk. Bot. Ark.** Dansk Botanisk Arkiv. Copenhagen.
- Date Grow. Inst. Ann. Rept.** Date Growers Institute, Annual Report. Coachella, California.
- Del. St. Bd. Agric. Bull.** Delaware State Board of Agriculture. Bulletin. Dover, Delaware.
- Derbysh. Fmr.** Derbyshire Farmer. Derby.
- Deut. Forsch.** (Z.P.D.)
- Deut. LandeskZtg.** Deutsche Landeskultur-Zeitung. Berlin.
- Deut. Landw. Tierz.** Deutsche Landwirtschaftliche Tierzucht. Hannover.
- Dokuchaev Inst. Studies Genesis Geography Soils.** Dokuchaev Soil Institute. Studies of the Genesis and Geography of Soils. Academy of Sciences Press. Moscow.
- E. Afric. Agric. J.** East African Agricultural Journal. Nairobi.
- E. Afric. Agric. Res. Sta. Amani Pub.** East African Agricultural Research Station, Amani. Publication. Dar-es-Salaam.
- Econ. Tec. Agric. Madrid.** Economica y Técnica Agrícola. Madrid.
- Egypt Hort. Sect. Leaflet.** Ministry of Agriculture, Egypt. Leaflet Horticultural Section. Giza.
- Electrif. Selsk. Khoz.** Elektrifikatsia Selskogo-Khozia-stva. Moscow.
- Emp. Cott. Grow. Corp. Conf. Rept.** Empire Cotton Growing Corporation Conference. Report. London.
- Engineer, London.** The Engineer (with Metallurgical Supplement). London.
- Engng. Contract Rec.** Engineering and Contract Record. Toronto.
- Engng. News-Rec.** Engineering News-Record. New York.
- Erdész. Kisérl.** Erdészeti Kísérletek. Forstliche Versuche. Forest Researches. Recherches Forestières. Sopron, Hungary.
- Erdész. Lapok.** Erdészeti Lapok. Budapest.
- Estac. Expt. Agric. Tucumán Circ.** Estación Experimental Agrícola de Tucumán. Circular. Tucumán, Argentine.
- Farm. Res.** Farm Research. New York Agricultural Experiment Station. Geneva.
- Farm. Week. S. Africa.** Farmer's Weekly. Bloemfontein.
- Farmer.** St. Paul, Minnesota.
- Forestry Chronicle.** Canadian Society of Forest Engineers. Knowlton, Quebec, Canada.
- ForschDienst.** Forschungsdienst. Formerly Deutsche Landwirtschaftliche Rundschau. Berlin.
- Forstl. Vers.** Forstliche Versuche. See Erdész. Kisérl.
- Fruit-Grower.** London.
- Fruit Products J.** The Fruit Products Journal and American Vinegar Industry. New York.
- Fruits Primeurs.** Revue Marocaine des Fruits et Primeurs

ABBREVIATIONS OF JOURNALS AND PERIODICALS

- de l'Afrique du Nord.** Since 1937: Fruits et Primeurs de l'Afrique du Nord et la Revue Française de l'Oranger. Casablanca.
- Fuel.** Fuel (in Science and Practice). London.
- Gard. Chron.** Gardener's Chronicle. London.
- Gartenbauwirt.** Die Gartenbauwirtschaft. Berlin.
- Gas.** Formerly Western Gas. Los Angeles.
- Geog. J.** Geographical Journal. (Royal Geographical Society). London.
- Geography.** London.
- Georgofili.** Atti della R. Accademia dei Georgofili. Florence.
- Gesund. Tech. Städtehyg.** (Gesundheits - Ingenieur. Zeitschrift für die Gesamte Städtehygiene. Munich ?)
- Gifu Imp. Coll. Agric. Res. Bull.** Gifu Imperial College of Agriculture. Research Bulletin. Gifu, Japan.
- Gold Coast Farmer.** Accra.
- Gordian.** Hamburg.
- Hassadeh.** (Organization of Agricultural Labourers in Palestine). Tel-Aviv.
- Herb. Revs.** Herbage Reviews. Aberystwyth.
- Hort. Educ. Assoc. Yrbk.** See Sci. Hort.
- Husbandry.** Norwich.
- Hydrochem. Materialien U.S.S.R.** Hydrochemische Materialien U.S.S.R. (Hydrokhimicheskie Materialy). Kostov-on-Don.
- Hydrotekh. Stroit.** Hydrotekhnicheskoe Stroitel'stvo. Moscow.
- Imp. Bur. Soil. Sci. Tech. Commun.** Imperial Bureau of Soil Science. Technical Communication. Harpenden, England.
- Imp. Counc. Agric. Res. Misc. Bull.** Imperial Council of Agricultural Research. Miscellaneous Bulletin. Delhi.
- Imp. Forestry Inst. Pap.** Imperial Forestry Institute. Paper. Oxford.
- Indian Engng.** Indian Engineering. Calcutta.
- Indian Forest Rec. Sylvicult.** Indian Forest Records. Sylviculture. Calcutta.
- India-Rubber J.** India-Rubber Journal. London.
- Indian Med. Gaz.** Indian Medical Gazette. Calcutta.
- Inst. Agron. São Paulo Bol. Tech.** Secretaria da Agricultura Industria e Commercio do Estado de São Paulo. Instituto Agronomico de Campinas. Boletim Technico. São Paulo.
- Inst. Bolot. Khoz. Minsk.** Vsesouzny Institut Bolotnogo Khoziastva Minsk (All-Union Bog Institute). Moscow.
- Inst. Brit. Geog. Pub.** The Institute of British Geographers. Publication. London.
- Inst. Geol. Român. Stud. Tech.** Institutul Geologic al României. Studii Technice si Economice. Bucharest.
- Inst. Kallit. Fyton Thessalonike Epist. Delt.** (E.S.R.)
- Inst. Nat. Et. Agron. Congo Belge, Ser. Sci. Pub.** Institut National pour l'Étude Agronomique du Congo Belge. Série Scientifique. Publications. Brussels.
- Inst. Tab. Makh. Prom.** Institut Tabachnoi i Makhorochnoi Promyshlennosti (Institute of the Tobacco and Makhorka Industry). Krasnodar.
- Int. Cong. Sci. Management.** International Congress of Scientific Management. Washington, D.C.

ABBREVIATIONS OF JOURNALS AND PERIODICALS

- Int. Rev. Hydrobiol.** Internationale Revue der Gesamten Hydrobiologie und Hydrographie. Leipzig.
- Iowa Engng. Expt. Sta.** Iowa State College of Agriculture and Mechanic Arts, Engineering Experiment Station. Bulletin. Ames, Iowa.
- Izv. Biol. Geol. Inst. Irkutsk. Univ.** (Pedology).
- Izv. Biol. Inst. Perm.** Izvestia Biologicheskogo Nauchno-Issledovatel'skogo Instituta pri Permskom Gosudarstvennom Universitete imeni M. Gor'kogo (Bulletin of the Institute of Biological Research). Perm.
- Izv. Kubyshvskogo S.-Kh. Inst.** Izvestia Kubyshvskogo Sel'sko-Khoziastvennogo Instituta (Bulletin of the Kubyshv Agricultural Institute). U.S.S.R.
- Izv. Severokavkaz. Inst. Hydrotekh.** Izvestia Severokavkazskogo Instituta Hydrotekhniki (Bulletin of the North Caucasian Institute for Hydrotechnique). U.S.S.R.
- J. Agric. Assoc. China.** Journal of the Agricultural Association of China. Nanking.
- J. Agric. P. R.** Journal of Agriculture of the University of Puerto Rico. Rio Piedras.
- J. Amer. Pharm. Assoc.** Journal of the American Pharmaceutical Association. Washington, D.C.
- J. Amer. Water Works Assoc.** Journal of the American Water Works Association. New York.
- J. Assoc. Chinese Amer. Engrs.** Journal of the Association of Chinese and American Engineers. Peking.
- J. Aust. Inst. Agric. Sci.** The Journal of the Australian Institute of Agricultural Science.
- J. Boston Soc. Civil Engrs.** Journal of the Boston Society of Civil Engineers. Boston.
- J. Chem. Educ.** Journal of Chemical Education. Easton, Pa.
- J. Chin. Chem. Soc.** Journal of the Chinese Chemical Society. Peiping.
- J. Dept. Agric. I.F.S.** Journal of the Department of Agriculture. Irish Free State. Dublin.
- J. Fabr. Sucre.** Journal des Fabricants de Sucre. Paris.
- J. Franklin Inst.** Journal of the Franklin Institute. Philadelphia.
- J. Geol.** Journal of Geology. Chicago.
- J. H. B.** Jealott's Hill Agricultural Research Bulletin. I.C.I. Bracknell, Berks.
- J. Helminth.** Journal of Helminthology. London.
- J. Hort. Assoc. Japan.** Journal of the Horticultural Association of Japan. Tokyo.
- J. Hort. Suisse.**
- J. Hyg.** Journal of Hygiene. Cambridge.
- J. Indian Bot. Soc.** Journal of the Indian Botanical Society. Madras.
- J. Japan. Assoc. Advanc. Sci.** Journal Japanese Association for the Advancement of Science.
- J. Landw. Riga.** (Bied. Zbl.)
- J. Nutrit.** Journal of Nutrition. Baltimore.
- J. Proc. Aust. Chem. Inst.**
- J. Proc. Roy. Soc. N.S. Wales.** Journal and Proceedings of the Royal Society of New South Wales. Sydney.
- J. Sci. Instrum.** Journal of Scientific Instruments. London.
- J. Sci. Iowa St. Coll.** Journal of Science, Iowa State College. Ames, Iowa.
- J. Soc. Chem. Indust.** Journal of the Society of Chemical Industry. London.

ABBREVIATIONS OF JOURNALS AND PERIODICALS

- Jahresber. Schles. Ges. Vaterl. Cult.** Jahresbericht der Schlesischen Gesellschaft für Vaterländische Cultur. Breslau.
- Jamaica Dept. Sci. Agric. Bull.** Department of Science and Agriculture, Jamaica. Bulletin. Kingston.
- Japan Min. Agric. Lit. Agric. Improvements.** (Hort. Abs.).
- Junge Landw. Feld, Hof u. Garten.** (C.A.).
- Kalilj.** Moscow, U.S.S.R.
- Karjatalous.**
- Kern. Maanedstbl.** Kemisk Maanedstblad og Norges Handelsblad for Kemisk Industri. Copenhagen.
- Kew Bull.** Bulletin of Miscellaneous Information. Royal Botanic Gardens, Kew. London.
- Kolloid. Zh.** Kolloidny Zhurnal. Zhurnal Teoreticheskoi i Prikladnoi Khimii i Fiziki (Colloid Journal. Journal of Theoretical and Applied Physics and Chemistry). Voronezh.
- Konservaia Prom.** Konservnaia Promyshlennost (Canning Industry). Moscow.
- Korte Meded. BoschbPoeftsta. Groningen.** Korte Mededeelingen van het Boschbouwproefstation. Groningen.
- Lake States Forest Expt. Sta. Tech. Notes.** Lake States Forest Experiment Station. Technical Notes. University Farm, St. Paul, Minn.
- Landb. u. Tech.** Landbau und Technik. Berlin.
- Landenberg Laboratory, Pennsylvania.**
- Landeskultur.** Vienna.
- Landw. Masch.** (Z.P.D.).
- Landw. Zifragen. Csl. Akad. Landw.** (Z.P.D.).
- Latvian Forest Res. Sta. Reports.** Latvian Forest Research Station. Reports Latvijas Mežu Pētīšanas Stacijas Raksti. Mitteilungen der Forstlichen Versuchsanstalt Lettlands. Riga.
- Lavoura.** A Lavoura. Boletim da Sociedade Nacional de Agricultura. Rio de Janeiro.
- Legkie Metally.** (Light Metals). Moscow.
- Leningr. Univ. Uchen. Zap.** Leningrad University Uchenye Zapiski (Annals. Series of Geology, Soil Science and Geography). Leningrad.
- Lighter.** The Tobacco Service of the Department of Agriculture, Canada. Ottawa.
- Maat. Juk.** (B.C.A.).
- Mach. Agric. Equip. Rur.** Machinisme Agricole et Equipement Rural. Revue Mensuelle. Paris.
- Magyar Ampelol. Évkönyve.** Magyar Kir. Szőlő-és Borkészítési Központi Kísérleti Állomás (Ampelologiai Intézet) Évkönyve (Annual of the Royal Hungarian Central Experiment Station for Vine and Oenological Research. (Ampelological Institute). Budapest.
- Malay. Forester.** Malayan Forester. Kuala Lumpur.
- Mater. Pozn. Gleb. Polsk.** Materjałow do Poznania Gleb. Polskich. Puławy.
- Mauritius Sugarcane Res. Sta. Bull.** Mauritius Sugarcane Research Station. Bulletin. Réduit.
- Medd. Kgl. LandtbrAkad. LantbrAvd.** Meddelande från Kungl. Landtbruksakademien. Lantbruksavdelning. Stockholm.
- Medd. Stat. Met.-Hydrograf. Anst. Ser. Uppsats.** Meddelanden Statens Meteorologisk-Hydrografiska Anstalt. Serien Uppsatsser. Sweden.

ABBREVIATIONS OF JOURNALS AND PERIODICALS

- Meded. Alg. Proefsta. Avros Alg. Ser.** Mededeelingen van het Algemeen Proefstation der Avros. Algemeen Serie. Batavia.
- Meded. Cheribon Expt. Sta.** (Int. Sug. J.).
- Meded. LandbProefsta. Surinam.** Mededeelingen. Landbouwproefstation, Surinam. Paramaribo.
- Meld. Stat. Forsøkssta. Fjellbyggdene.** Melding fra Statens Forsøksstasjon for Fjellbyggdene. Oslo.
- Meld. Stat. Forsøksgård Forus.** Melding fra Statens Forsøksgård på Forus. Norway.
- Meld. Stat. Forsøksgård Voll.** Melding fra Statens Forsøksgård på Voll (Annual Report of the Voll State Experiment Farm). Norway.
- Meld. Stat. Forsøkssta. Møistad.** (Bied. Zbl.).
- Mem. Indian Inst. Sci.** Memoirs of the Indian Institute of Science. Bangalore.
- Mem. Lab. Pat. Batt. Ist. Agrar. Pisa.** (Memorie del Laboratorio di Patologia e Batt. del R. Istituto Agrario di Pisa ?)
- Met. Prat. La Meteorologia** Practica. Pubblicazione Bimenziale dell'Osservatorio di Montecassino. Subiaco. Montecassino. Italy.
- Metall u. Erz.** Zeitschrift für Metallhüttenwesen und Erzbergbau einschliesslich Aufbereitung. Halle (Saale).
- Météorologie.** (Société Météorologique de France). Paris.
- Mfg. Chem.** Manufacturing Chemist. London.
- Mich. Acad. Sci. Pap.** Papers from the Michigan Academy of Science, Arts and Letters. New York.
- Min. Agric. Advis. Leaflet.** Ministry of Agriculture and Fisheries. Advisory Leaflet. London.
- Miner. Udob.** Mineral'nye Udobrenia i insektofungisidy (Mineral Fertilizers and Insectofungicides). Scientific Institute of Fertilizers and Insectofungicides. Moscow.
- Missouri Bot. Gard. Bull.** Missouri Botanical Garden Bulletin. St. Louis.
- Mitt. Kali-Forsch. Anst.** Mitteilungen der Kali-Forschungs-Anstalt. Berlin.
- Mitt. Landw.** Mitteilungen der Landwirtschaft. *Formerly* Mitteilungen der Deutschen Landwirtschaftsgesellschaft. Berlin.
- Mühlenlab.** Mühlenlaboratorium. Leipzig.
- N. Guinea Dept. Agric. Bull.** Department of Agriculture, Territory of New Guinea, Rabaul. (Canberra ?)
- N. Guinea Agric. Gaz.** The New Guinea Agricultural Gazette, Department of Agriculture, Territory of New Guinea, Rabaul. Canberra.
- Nat. Pecan Assoc. Proc.** National Pecan Association. Bulletin containing Report of Proceedings of the Annual Convention. Mobile, Alabama.
- Nat. Univ. Chekiang Res. Pap.** National University of Chekiang. Research Papers. Chekiang, China.
- Naturalist.** London.
- Nature, Paris.** La Nature. Paris.
- Naturwiss. u. Landw.**
- Nauch. Plodovod. Michurinsk.** Nauchnoe Plodovodstvo (Scientific Fruitgrowing). Michurinsk, U.S.S.R.
- Nauch. Zap.** Nauchnye Zapiski po Sakharnoi Promyshlennosti (Scientific Notes on the Sugar Industry). *Formerly* Naukovi Zapiski z Sakharnoi Promyshlennosti.

ABBREVIATIONS OF JOURNALS AND PERIODICALS

- Neb. Univ. Bull.** Nebraska University Bulletin. Lincoln, U.S.A.
- Neues Jahrb. Min. Geol.** Neues Jahrbuch für Mineralogie, Geologie u. Paläontologie. Stuttgart.
- Newfoundland Agric. Sect. Bull.**
- Norsk Havetid.** Norsk Havetidende. Oslo.
- Nuovi Ann. Agric.**
- Nuovo G. Bot. Ital.** Nuovo Giornale Botanico Italiano. Florence.
- Nutr. Abs.** Nutrition Abstracts. Aberdeen.
- Off. Reg. Agric. Midi.** Office Regionale Agricole du Midi. Bulletin Trimestriel. Marseille.
- Ohio Engng. Expt. Sta. Circ.** Ohio State University Engineering Experiment Station. Circular. Columbus, Ohio.
- Olivicoltura.** (Hort. Abs.).
- Onze Ploeg.** (Landbouwkundig Maandschrift). Louvain, Belgium.
- Orchard. N.Z.** Orchardist of New Zealand. Wellington.
- Oregon St. Hort. Soc. Ann. Rept.** Oregon State Horticultural Society. Annual Report. Portland, Oregon.
- Ortofrutticolt. Ital.** L'Ortofrutticoltura Italiana. Rome.
- Peru Esta. Expt. Agric. La Molina Inf.** Estación Experimental de Agricultura, La Molina. Informe. Lima, Peru.
- Petroleum, N.Y.** New York.
- Pflanzenbau.** Monatsschrift für den Gesamten Acker- und Pflanzenbau und das Pflanzenbauliche Versuchswesen. Leipzig.
- Phil. Trans.** Philosophical Transactions of the Royal Society. London.
- Philipp. Nat. Res. Council. Rept.** National Research Council, Philippines. Report. Manila.
- Philipp. Sug. Assoc. Rept. Res. Bur.** Philippine Sugar Association. Report of the Research Bureau. Manila.
- Physiol. Res.** Physiological Researches. Baltimore, Md.
- Physiol. Res. Makhorka Plants.**
- Pícinanárské Zpravy.** Czechoslovakia.
- Planter, Malaya.** (Incorporated Society of Planters). Kuala Lumpur.
- Planteur, Ile de la Réunion.** Le Planteur de l'Ile de la Réunion. Saint-Denis, Réunion.
- Plodoovoshchnoe Khoziastvo.** (Fruit and Vegetable Husbandry). Moscow.
- Polska Akad. Um. Prace Roln.-Leśne.** Polska Akademia Umiejętności Prace Rolniczo-Leśne. Krakow.
- Priroda.** (Nature). Academy of Sciences, Leningrad.
- Probl. Zhivotnov.** Problemy Zhivotnovodstva (Problems of Animal Husbandry). Moscow.
- Proc. Acad. Sci. Amsterdam.** Proceedings of the Royal Academy of Sciences of Amsterdam. Koninklijke Akademie van Wetenschappen te Amsterdam.
- Proc. Acad. Sci. U.P. India.** Proceedings of the Academy of Sciences of the United Provinces, India. Now, Proceedings of the National Academy of Sciences, India. Allahabad.
- Proc. Amer. Gas. Assoc.** Proceedings of the American Gas Association. New York.
- Proc. Amer. Petroleum Inst. Sect. IV.** Proceedings of the Annual (or Mid-Year) Meeting, American Petroleum Institute. Section IV. Production. New York City.

ABBREVIATIONS OF JOURNALS AND PERIODICALS

- Proc. Ann. Cong. S. Afric. Sug. Tech. Assoc.** Proceedings of the Annual Congress of the South African Sugar Technologists' Association. Durban.
- Proc. Ann. Meetg. Comm. Fert. Amer. Soc. Agron.** Proceedings of the Annual Meeting of the Committee on Fertilizers of the American Society of Agronomy. Washington, D.C.
- Proc. Assoc. Econ. Biol. Coimbatore.** Proceedings of the Association of Economic Biologists, Coimbatore.
- Proc. Assoc. S. Agric. Workers.** Proceedings of the Annual Convention, Association of Southern Agricultural Workers. Atlanta, Ga.
- Proc. Conf. E. Afric. Agric. Chem.** Proceedings of the Conference of East African Agricultural and Soil Chemists. Nairobi.
- Proc. Cong. Agric. Sci. Riga.** Proceedings of the Congress of Agricultural Science. Riga.
- Proc. Cuban Sug. Tech. Assoc.** Proceedings of the Cuban Sugar Technologists Association. Havana.
- Proc. Hawail. Acad. Sci. Bishop Mus. Spec. Pub.** Proceedings of the Hawaiian Academy of Science, Bernice P. Bishop Museum Special Publication.
- Proc. Imp. Acad. Tokyo.** Proceedings of the Imperial Academy. Tokyo.
- Proc. Indian Acad. Sci.** Proceedings of the Indian Academy of Sciences. Indian Institute of Science. Bangalore.
- Proc. Inst. Chem. India.**
- Proc. Int. Bot. Cong.** Proceedings of the International Botanical Congress.
- Proc. Int. Soc. Sug. Cane Tech.** Proceedings of the International Society of Sugar-Cane Technologists. Brisbane.
- Proc. Nat. Acad. Sci. India.** Proceedings of the National Academy of Sciences, India. *Formerly* Proceedings of the Academy of Sciences of the United Provinces, India. Allahabad.
- Proc. Nat. Inst. Sci. India.** Proceedings of the National Institute of Sciences of India. Calcutta.
- Proc. Pa. Acad. Sci.** Proceedings of the Pennsylvania Academy of Science. Harrisburg, Pa.
- Proc. Pacific Sci. Cong.** Proceedings of the Pacific Science Congress, Toronto.
- Proc. Phys. Soc.** Proceedings of the Physical Society. Cambridge.
- Proc. Queensland Soc. Sug. Cane Tech.** Proceedings of the Queensland Society of Sugar Cane Technologists. Brisbane.
- Proc. Roy. Geog. Soc. Aust.** Proceedings of the Royal Geographical Society of Australia. (Adelaide ?)
- Proc. Roy. Soc. Victoria.** Proceedings of the Royal Society of Victoria. Melbourne.
- Proc. S.-E. Pecan Grow. Assoc.** Proceedings of the Annual Convention of the South-Eastern Pecan Growers Association. Albany, Ga.
- Proc. S. W. Soil Water Conserv. Conf. Tex.** Proceedings of the South Western Soil Water Conservation Conference, Texas.
- Proc. Soc. Biol. Chem. India.** Proceedings of the Society of Biological Chemists, India. Bangalore.
- Proc. Soil Sci. Soc. Amer.** Proceedings of the Soil Science Society of America. Michigan.
- Proc. Va. Hort. Soc.** Proceedings of the Virginia Horticultural Society. (Staunton, Va. ?)

ABBREVIATIONS OF JOURNALS AND PERIODICALS

- Proc. Wash. St. Hort. Assoc.** Proceedings of the Annual Meeting of the Washington State Horticultural Association. Washington.
- Protoplasma.** Leipzig.
- Public Works.** N.Y. New York.
- Quart. Bull. Mich. Agric. Expt. Sta.** Quarterly Bulletin of the Michigan Agricultural Experiment Station. East Lansing, Michigan.
- Quart. J. Geol. Soc. London.** Quarterly Journal of the Geological Society of London. London.
- Quart. Rev. Biol.** Quarterly Review of Biology. Baltimore, Md.
- Quebec Pomol. Fruit-Grow. Soc.** (B.C.A.).
- R.A.E.** Review of Applied Entomology. London.
- R.A.M.** Review of Applied Mycology. Kew, Surrey.
- Reaseheath Rev.** Reaseheath Review; a Journal of Cheshire Agriculture. Nantwich.
- Rec. Geol. Surv. India.** Records of the Geological Survey of India. Calcutta.
- Rec. Trav. Bot. Néerland.** Recueil des Travaux Botaniques Néerlandais. Société Botanique Néerlandaise. Nimègue.
- Rec. Trav. Chim.** Recueil des Travaux Chimiques des Pays-Bas et de la Belgique. Leiden.
- Rech. Fert. Sta. Agron. Douai.**
- Reichsamt f. Wetterdienst.** (Berlin ?)
- Rept. Govt. Sug. Expt. Sta. Tainan, Formosa.** Report of the Government Experiment Station, Tainan. Formosa, Japan.
- Repts. Assoc. Hawali. Sug. Tech.** Reports of the Association of Hawaiian Sugar Technologists. Honolulu.
- Rev. Agric. Guadeloupe.** Revue Agricole. Organe du Service de l'Agriculture de la Guadeloupe et Dépendences. Pointe-à-Pître.
- Rev. Agric. Piracicaba (E. de S.-Paulo).** See Rev. Agric. S. Paulo.
- Rev. Agric. S. Paulo.** Revista de Agricultura. Piracicaba. (E. de São Paulo).
- Rev. Argent. Agron.** Revista Argentina de Agronomía. Organó de la Sociedad Argentina de Buenos Aires. Buenos Aires.
- Rev. Assoc. Rur. Uruguay.** Revista de la Asociación (Federación) Rural del Uruguay. Montevideo.
- Rev. Cafet. Colombia.** Revista Cafetera de Colombia. Bogotá.
- Rev. Cent. Estud. Agron., B. Aires.** Revista del Centro de Estudiantes de Agronomía. Buenos Aires.
- Rev. Chim. Indust.** Revue de Chimie Industrielle. Paris.
- Rev. Colon. Ital., Bologna.** Revista delle Colonie Italiane. Bologna.
- Rev. Dept. Nac. Prod. Animal. (Brazil).** Revista do Departamento Nacional da Producao Animal Instituto de Biologia Animal. Rio de Janeiro.
- Rev. Fac. Agron., B. Aires.** Revista de la Facultad de Agronomía y Veterinaria. Buenos Aires.
- Rev. Fac. Quím. Indust. Agric. Univ. Nac. Litoral.** Revista de la Facultad de Química Industrial y Agrícola (Universidad Nacional de Litoral). Santa Fé, Argentina.
- Rev. Farm. Argentina.** Revista Farmacéutica y Bioquímica Argentina. Buenos Aires.
- Revue de Géol.** Revue de Géologie et des Sciences Connexes. Liège.

ABBREVIATIONS OF JOURNALS AND PERIODICALS

- Rev. Hort. Agríc. Afr. N.** Revue Horticole et Agricole de l'Afrique du Nord. Algiers.
- Rev. Int. Tabacs.** Revue Internationale des Tabacs. Paris.
- Rev. Madagascar.** Revue de Madagascar. Paris.
- Rev. Nac. Agric. Bogotá.** Revista Nacional de Agricultura. Bogotá, Colombia.
- Rev. Sci.** Revue Scientifique. Paris.
- Rhein. Mschr. Obstb.** Rheinische Monatsschrift für Obst-Garten- u. Gemüsebau. Bonn.
- Ricerca Sci. Roma.** La Ricerca Scientifica ed il Progresso Tecnico nell'Economia Nazionale. Rome.
- Rijkslandb.Proefsta. Akker-en Weideb. Groningen.** Rijkslandbouwproufstation Akker- en Weidebouw te Groningen. The Hague.
- Riv. Frutticoltura.** Rivista di Frutticoltura. Ravenna.
- Rocz. Nauk Ogród.** Rocznik Nauk Ogródnichych (Annales des Sciences Horticoles). Warsaw.
- Rodrigüesia.** Revista do Instituto de Biologia Vegetal, Jardim Botânico e Estação Biológica do Itatiaia. Rio de Janeiro.
- Roy. Agric. Soc. Egypt Chem. Sect. (or Tech. Sect.) Bull.** Royal Agricultural Society, Egypt. Chemical Section (or Technical Section). Bulletin. Cairo.
- S. Afric. Geog. J.** South African Geographical Journal. Pretoria.
- S. Africa Dept. Agric. Forestry Sci. Bull.** Union of South Africa, Department of Agriculture and Forestry. Scientific Bulletin. Pretoria.
- Sands Clays and Minerals.** Chatteris, England.
- Sborn. Masaryk. Akad. Práce.** Sbornik Masarykovy Akademie Práce (Collected Works of the Masaryk Academy of Work). Prague.
- Sborn. Rab. Azovo-Chernomorsk. S.-Kh. Inst.** Sbornik Rabot Azovo-Chernomorskogo Selsko - Khoziastvennogo Instituta (Collection of papers of the Azov-Black Sea Agricultural Institute). U.S.S.R.
- Sborn. Rab. Obsled. Pochv Abkhaz., Krasnodar.** Sbornik Rabot po Obsledovaniyu Pochv Raionov Abkhazskoi SSR (Collected Papers on the Soils of the Abkhaz SSR). Krasnodar.
- Sborn. Rab. Perm. S.-Kh. Inst.** Sbornik Nauchno-Issledovatel'skikh Rabot Permskogo Selsko-Khoziastvennogo Instituta (Transactions of the Perm Agricultural Research Institute). Perm, U.S.S.R.
- Sborn. Rab. S. Kavkaz. Zern. Inst.** Sbornik Rabot Severno-Kavkazskogo Zernovogo Instituta (Transactions of the N. Caucasian Grain Institute). U.S.S.R.
- Sborn. Rab. VNIS.** Sbornik Rabot Nauchno-Issledovatel'skogo Instituta Sakharnoi Promyshlennosti (Collection of papers of the Sugar Research Institute). Moscow.
- Sborn. Uzbekistan.** (Pedology).
- Sborn. Vyzkum. Ústavu Zeměd. Čsl.** Sbornik Vyzkumných Ústavu Zemědělských Republiky Československé (Recueil de Travaux des Instituts des Recherches Agronomiques de la République Tchécoslovaque). Prague.
- Schweiz. Ztschr. Forstw.** Schweizerische Zeitschrift für Forstwesen. Bern, Switzerland.
- Schweiz. Ztschr. Obst- u. Weinb.** Schweizerische Zeitschrift für Obst- und Weinbau. Frauenfeld.

ABBREVIATIONS OF JOURNALS AND PERIODICALS

- Sci. Hort.** Scientific Horticulture. The Journal of the Horticultural Education Association. *Formerly* the H.E.A. Year Book. London.
- Scot. Forestry J.** Scottish Forestry Journal. Edinburgh.
- S.C.S.—T.P.** United States Department of Agriculture Soil Conservation Service. Technical Publication. Washington, D.C.
- Semenovodstvo.** *Now* Selekt-sia i Semenovodstvo (Plant Breeding and Seed Production). Moscow.
- Siemens-Ztschr.** Siemens-Zeitschrift. Siemensstadt-bei-Berlin.
- Smithson. Misc. Coll.** Smithsonian Miscellaneous Collections. Washington.
- Soap.** New York.
- Soil Conservation.** Official Organ of the Conservation Service of the United States Department of Agriculture. Washington, D.C.
- Soils and Fertilizers, Hangchow.**
- Sotsial. Rekonstr. S. Kh.** Sotsialisticheskaja Rekonstruktsia Selskogo Khoziastva (Socialist Reconstruction of Agriculture). Moscow.
- Sotsial. Zern. Khos.** Sotsialisticheskoe Zernovoe Khoziastvo (Socialistic Grain Farming). Saratov.
- Sovet. Bot.** Sovetskaja Botanika (Soviet Botany). Leningrad.
- Sovet. Sakhar.** Sovetsky Sakhar (Soviet Sugar). Moscow.
- Sovet. Subtrop.** Sovetskie Subtropiki (Soviet Subtropics). Moscow.
- Sprechsaal.** Sprechsaal für Keramik-Glas-Email. Fach und Wirtschaftsblatt für die Silikat-Industrien. Coburg, Germany.
- Sredneaz. Nauch. Inst. Khlopkov.** See Bull. Sredneaz. Nauch. Inst. Khlopkov.
- Sta. Sper. Granicolt.** "Benito Mussolini" Pub. Stazione Sperimentale di Granicoltura "Benito Mussolini". Pubblicazione. Catane, Italy.
- Stal.** (Steel). Kharkov.
- Sug. Beet J.** Sugar Beet Journal. Greeley, Colo.
- Suppl. J. Roy. Stat. Soc.** Supplement (Industrial and Agricultural Research Section). Journal of the Royal Statistical Society. London.
- Sveklovichnoe Polevodstvo** (Sugarbeet Husbandry). Moscow.
- Tabachnaia Prom.** Tabachnaia Promyshlennost (Tobacco Industry). Moscow.
- Te Kura Ngahere. N.Z.J. Forestry.** New Zealand Journal of Forestry. (New Zealand Institute of Foresters). Christchurch, New Zealand.
- Tea Res. Inst. Ceylon Bull.** Tea Research Institute of Ceylon. Bulletin. St. Coombs, Talawakelle.
- Tekn. Aikakauslehti.** Teknillinen Aikakauslehti (Technical Journal). Helsingfors.
- Texas St. Reclam. Dept. Bull.**
- Tidsskr. Landekon.** Tidsskrift for Landøkonomi. Copenhagen.
- Trans. Amer. Soc. Civil Engrs.** Transactions of the American Society of Civil Engineers. New York.
- Trans. Brit. Mycol. Soc.** Transactions of the British Mycological Society. London.
- Trans. Ill. St. Hort. Soc.** Transactions of the Illinois State Horticultural Society. Salem, Ill.
- Trans. Kans. Acad. Sci.** Transactions of the Kansas Academy of Science. Manhattan, Kansas.

ABBREVIATIONS OF JOURNALS AND PERIODICALS

- Trans. Ky. St. Hort. Soc.** Transactions of the Kentucky State Horticultural Society. Frankfort, Kentucky.
- Trans. Mendeleev Cong. Theor. Appl. Chem.** See Trudy Vsesoiuznogo Mendeleevskogo S'ezda.
- Trans. Northumb. Agric. Disc. Soc.** Transactions of the Northumberland Agricultural Discussion Societies. Newcastle-on-Tyne.
- Trans. Roy. Soc. N.Z.** Transactions and Proceedings of the Royal Society of New Zealand (*formerly* Transactions and Proceedings of the New Zealand Institute). Wellington.
- Trans. Roy. Soc. S. Africa.** Transactions of the Royal Society of South Africa. Cape Town.
- Trans. Roy. Soc. S. Aust.** Transactions of the Royal Society of South Australia. Adelaide.
- Trans. Sci. Soc. China.** Transactions of the Science Society of China. Shanghai.
- Trans. Soil Geobot. Inst. Tashkent.** Transactions of the Soil and Geobotanical Institute of the University of Central-Asia (Trudy Instituta Pochvovedeniia i Geobotaniki Sredne-Asiatskogo Gosudarstvennogo Universiteta). See also Acta Univ. Asiae Med. Tashkent.
- Trans. Soviet Sect. Int. Soc. Soil Sci.** Transactions of the Soviet Section of the International Society of Soil Science. Moscow.
- Trav. Soc. Nat. Leningr.** Travaux de la Société des Naturalistes de Leningrad (Trudy Leningradskogo Obshchestva Estestvoispytatelei). Leningrad.
- Trin. Tob. Dept. Agric. Bull.** Trinidad and Tobago Department of Agriculture. Bulletin. Port-of-Spain.
- Trinidad Sug. Cane Invest. Cttee. Ann. Rept.** The Sugar Cane Investigation Committee. Annual Report. Trinidad.
- Trudy Inst. Agrogrunt. Khem.** Trudy Naukovo Doslidnogo Institutu Agrogruntoznavstva te Khemizatsii S.-G. (Transactions of the Agricultural Institute of Soils and Chemistry). Kiev.
- Trudy Arkt. Inst.** Trudy Arkhticheskogo Instituta (Transactions of the Arctic Institute). Leningrad.
- Trudy Belorussk. S. Kh. Inst.** Trudy Belorusskogo Selsko-Khoziastvennogo Instituta (Transactions of the White Russian Agricultural Institute). U.S.S.R.
- Trudy Biol. Inst. Perm.** Trudy Biologicheskogo Nauchno-Issledovatel'skogo Instituta pri Permskom Gosudarstvennom Universitete (Travaux de l'Institut Biologique de Perm). Perm.
- Trudy Geog.-Econ. Nauch.-Issled. Inst.** Trudy Geografo-Ekonomicheskogo Nauchno-Issledovatel'skogo Instituta (Transactions of the Geographo-Economic Research Institute). U.S.S.R.
- Trudy Inst. Hydrotekh.** Trudy Instituta Hydrotekhniki (Transactions of the Institute for Hydrotechnique). U.S.S.R.
- Trudy Inst. Konopli.** Trudy Instituta Konopli (VNIKO) (Transactions of the Hemp Institute). U.S.S.R.
- Trudy Inst. Nov. Lub. Syr.** Trudy Instituta Novogo Lubianogo Syr'ia (Transactions New Bast-Fibres Research Institute). Moscow.

ABBREVIATIONS OF JOURNALS AND PERIODICALS

- Trudy Inst. Prikl. Mineral.** Trudy Instituta Prikladnoi Mineralogii (Transactions of the Institute of Economic Mineralogy). Moscow or Leningrad.
- Trudy Inst. S.-Kh. Mikrobiol.** Trudy Vsesoiuznogo Instituta Sel'skokhoziastvennoi Mikrobiologii (Bulletin of the State Institute of Agricultural Microbiology). Leningrad.
- Trudy Kiev. Opyt. S.-Kh. Sta.** Trudy Kievskoi Opytnoi Sel'sko-Khoziastvennoi Stantsii (Transactions of the Kiev Agricultural Experiment Station). Mironovka, Kiev.
- Trudy Komissii Irrigatsii.** Academy of Sciences U.S.S.R. Trudy Komissii po Irrigatsii (Transactions of the Irrigation Commission). Leningrad.
- Trudy Lomonosov. Inst. Geokhim.** Trudy Lomonosovskogo Instituta Geokhimii, Kristallografii i Mineralogii (Transactions of the Lomonosov Institute of Geochemistry, etc.). Moscow.
- Trudy LOVIUAA.** Trudy Leningradskogo Otdelenia Vsesoiuznogo Nauchno-Isledovatel'skogo Instituta Udobreniy, Agrotekhniki i Agropochvovedeniya imeni K. K. Gedroiza (Transactions of the Leningrad Department of the Gedroiz Institute of Fertilizers, etc.). Leningrad.
- Trudy Omsk. Inst. S.-Kh.** Trudy Omskogo Instituta Sel'skogo - Khoziastva (Transactions of the Omsk Agricultural Research Institute). Omsk.
- Trudy S.-Kh. Akad. Timiriaseva.** Trudy Sel'sko-Khoziastvennoi Akademii imeni Timiriaseva (Transactions of the Timiriasev Agricultural Academy). Moscow.
- Trudy Sekts. Fis. Pochv Fis.-Agron. Inst.** Trudy Sektsii Fiziki Pochv Fisiko-Agronomicheskoy Institut Akademii S.-Kh. Nauk imeni V. I. Lenina (Transactions of the Soil Physics Section of the Physico-Agronomical Institute of the Lenin Agricultural Academy). Leningrad.
- Trudy Torf. Inst.** Trudy Torfianogo Instituta (Transactions of the Peat Institute). U.S.S.R.
- Trudy Tsent. Sta. Ris. Khos.** Trudy Tsentralnoi Opytnoi Risovoi Stantsii (Transactions of the Central Rice Experiment Station). Krasnodar.
- Trudy TSINS.** Trudy Tsentralnogo Nauchno-Isledovatel'skogo Instituta Sakharnoi Promyshlennosti (Transactions of the Central Scientific Research Institute of the Sugar Industry). Moscow.
- Trudy Turkmen. Conf.** Trudy Turkmenkoi Konferentsii po Isucheniu Proisvoditel'nykh Sil (Transactions of the Turkmen Conference for the Study of Production). U.S.S.R.
- Trudy Viatskogo Vet. Inst.** Trudy Viatskogo Veterinarnogo Instituta (Transactions of the Viatska Veterinary Institute). U.S.S.R.
- Trudy VIUA.** Trudy Vsesoiuznogo Instituta Udobreniy, Agrotekhniki i Agropochvovedeniya imeni Gedroiza (Transactions of the Gedroiz Institute of Fertilizers and Soil Science). Moscow.
- Trudy VNIIL.** Trudy Vsesoiuznogo Nauchno-Isledovatel'skogo Instituta L'nianogo Khoziastva (Transactions of the All-Union Flax Research Institute). Torzhok, Moscow.
- Trudy Vsesoiuz. Mendeleev. S'ezda.** Trudy Vsesoiuznogo Mendeleevskogo S'ezda (Transactions of the Mendeleev Con-

ABBREVIATIONS OF JOURNALS AND PERIODICALS

- gress of Theoretical and Applied Chemistry). Kharkov, Ukraine.
- Tunisie Agric.** Tunisie Agricole. Tunis.
- U.S.D.A. Forest Serv.** United States Department of Agriculture. Forest Service. Washington, D.C.
- U.S.D.A. Soil Conserv. Serv.** Tech. Pub. also SCS-TP United States Department of Agriculture. Soil Conservation Service. Technical Publication. Washington, D.C.
- U.S. Dept. Int. Soil Erosion Serv.** United States Department of the Interior. Soil Erosion Service. Washington, D.C.
- U.S. Pub. Health Engng. Abs.** United States Public Health Engineering Abstracts. Washington.
- Uchen. Zap. Moskov. Gosud. Univ.** Uchenye Zapiski. Moskovsky Gosudarstvennyy Universitet (Scientific Memoirs of Moscow State University). Moscow.
- Uchen. Zap. Saratov. Gosud. Univ.** Uchenye Zapiski Saratovskogo Gosudarstvennogo Universiteta imeni N. G. Chernyshevskogo (Scientific Memoirs of the University of Saratov). Saratov.
- Ugeskr. Landm.** Ugeskrift for Landmaend. Copenhagen.
- Univ. Minn. Agric. Ext. Div.** **Spec. Bull.** University of Minnesota Agricultural Extension Division. Special Bulletin.
- Uprawa Roslin i Nawozenie.** **Usp. Khim.** Uspekhi Khimii. Leningrad.
- Va. Fruit.** Virginia State Horticultural Society. Virginia Fruit. Staunton, Va.
- Va. Truck Expt. Sta. Bull.** Virginia Truck Experiment Station Bulletin. Norfolk, Va.
- Versl. Tech. Tarwe Comm.** Verslagen van de Technische Tarwe Commissie. Groningen.
- Vest. Akad. Nauk.** Vestnik Akademii Nauk (Bulletin of the Academy of Sciences). U.S.S.R.
- Vest. Dal'nev. Fil. Akad. Nauk SSSR.** Vestnik Dal'nevostochnogo Filiala Akademii Nauk S.S.S.R. (Bulletin of the Far Eastern Branch of the Academy of Sciences of the U.S.S.R.). Vladivostok.
- Vida Agric.** La Vida Agricola. Lima, Peru.
- Vineland Hort. Expt. Sta. Ontario Pub.** Vineland Horticultural Experiment Station, Ontario. Publication. Ontario.
- Vitim. Sborn. Rab. Sekt. Agrotech.** Vsesoiuzny Nauchno-Isledovatel'skiy Institut Tabachnoi i Makhorochnoi Promyshlennosti (Vitim) Sbornik Rabot Sektora Agrotechniki i Khimizatsii (All-Union Scientific Institute of the Tobacco and Makhorka Industry, Collection of Papers of the Section of Agrotechnique and Chemisation). Krasnodar.
- Vort Landbr.** Vort Landbruk. Copenhagen.
- Wash. St. Coll. Res. Stud.*** Washington State College Research Studies. Pullman, Washington.
- Wasserkr. u. Wirtsch.** Wasserkraft und Wasserwirtschaft. Munich.
- Wbl. Landesbauernsch. Bayern.**

ABBREVIATIONS OF JOURNALS AND PERIODICALS

- Weidew. u. Futterbau.** Weidewirtschaft und Futterbau. Beilage zu Deutsche Landwirtschaftliche Tierzucht. Hannover.
- Welsh Pl. Br. Sta. Bull.** Welsh Plant Breeding Station. Bulletin. Aberystwyth.
- Western Constr. News.** Western Construction News. San Francisco.
- Western Gas.** *See* Gas.
- Wochenbl. Landesbl. Pommern.**
- Yale Univ. Sch. Forestry Bull.** Yale University, School of Forestry. Bulletin. New Haven, Yale University.
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